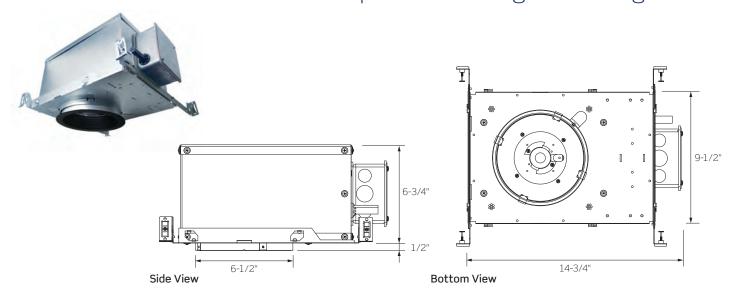


R6SA SERIES | 6-Inch Round StopAire™ Downlight Housing



Ceiling Opening: 6-5/8-Inches **Ceiling Thickness:** 1/2- to 2-Inches

	R6SA1	R6SA2	R6SA3	R6SA4	R6SA5	R6SA6
WATTAGE	12W	16W	21W	30W	38W	45W
LUMEN OUTPUT ¹	1100Lm	1600Lm	2200Lm	3000Lm	3700Lm	4100Lm
COLOR TEMPERATURE	2700K / 3000K /	3500K / 4000K		,	,	
CRI	83 (80min) / 90+					
INPUT WATTAGE	12W	16W	21W	30W	38W	45W
INPUT CURRENT (A) 120V/277V/347V	.08/.04/.03	.12/.06/.04	.17/.08/.06	.23/.11/.08	.31/.14/.11	.36/.16/.12
INPUT VOLTAGE						
Standard Driver	120VAC / 277VAC	/347VAC, 50/60	Hz			
Lutron Eco-System® Driver	120VAC / 277VAC	, 50/60Hz			N/A	N/A
eldoLED ECOdrive / SOLOdrive	120VAC / 277VAC	, 50/60Hz				N/A
DRIVER POWER FACTOR	> 0.90					
TOTAL HARMONIC DISTORTION (THD)	< 20%					
LISTINGS	cCSAus Certified	to UL Standards;	Suitable for Damp	Locations		
CCSAus Damp ENERGY Air-tight WSEC CCEA Compliant Rated	ENERGY STAR® Certified: – All wattage/lumen options are ENERGY STAR® Certified – ENERGY STAR® Certified Trims: C6322-PL, CN6322-PL, C6322-WHT, CN6322-WHT, C6322-CLR and					
	Chicago Plenum F	Housings are CCEA	A Listed			
WARRANTY	Five (5) year repla	cement after date	e of purchase			
SYSTEM RATING	50,000 Hours @	70% Lumen Mainte	enance			

^{1.} Approximate lumen output based on 3000K performance; see photometric test results for additional information



CATALOG NO.

DATE PROJECT TYPE

R6SA SERIES | 6-Inch Round StopAire™ Downlight Housing

ORDERING INFORMATION

Example Order: R6SA130K12D

Housing/LED Series	Color Temp/CRI	Electrical	Dimming
R6SA1 - 12W/1100lm	83 (80min) CRI	12 - 120V	D ² - TRIAC/ELV/0-10V Dimming
R6SA2 - 16W/1600lm	27K - 2700K	27 - 277V	D2 ¹ - 347V 0-10V Dimming
R6SA3 - 21W/2200lm	30K - 3000K	34 ¹ - 347V	D4 ³ - Lutron Hi-lume 1% EcoSystem Driver
R6SA4 - 30W/3000lm	35K - 3500K	I	with Soft-on, Fade-to-Black
R6SA5 - 38W/3700lm	40K - 4000K		D6 ⁴ - eldoLED ECOdrive, 0-10V, 1% Dimming
R6SA6 - 45W/4100lm	90+ CRI		D7 ⁴ - eldoLED ECOdrive, DALI, 1% Dimming
	27KC - 2700K		D8 ⁴ - eldoLED SOLOdrive, 0-10V, 0.1% Dimming
	30KC - 3000K		D9 ⁴ - eldoLED SOLOdrive, DALI, 0.1% Dimming
	35KC - 3500K		
	40KC - 4000K		

^{1.} Only available for 347V Dimming (Option D2)

ACCESSORIES

Standard Hanger Bars Supplied with Housing

HB-30 - T-Bar Hanger Set

See "Trims for 6-Inch LED Downlights" Specification Sheet for compatible Trim information and details

^{2.} TRIAC and ELV Dimming for 120V only

^{3.} Lutron Eco-System Driver is available for both 120V and 277V. Lutron Dimming Options are available for Series 1 through 4 only (12W through 30W); not available for use with LED Series 5 or 6 (38W or 45W)

^{4.} eldoLED Drivers are programmed for Linear Curve Dimming as standard; for Logarithmic Curve Dimming, consult factory





R6SA SERIES | 6-Inch Round StopAire™ Downlight Housing

PRODUCT DETAILS

Construction

- Specification Grade 6-inch Round 16 Gauge Galvanized Steel StopAire™ Housing with Die-Cast Aluminum Heat Sink
- Requires minimum 3-inch clearance around Housing from insulation material; thermal protection provided in case of improper insulation use
- Quick-connect Light Engine for easy installation and removal
- Drivers are fully accessible from below the ceiling and can be easily removed
- Dual Nailer Hanger Bars are adjustable for 16- and 24-inch center joists (14-1/4- to 24-1/2-inch). Nailer Bars may be extended to rest on T-Bar ceilings; optional clip-on T-Bar Hangers available.
- Pre-wired Junction Box with eight (8) 1/2-inch Knockouts and four (4) 3/4-inch Knockouts
- Output over-voltage, over-current and short circuit protection
- Approved for Through Circuit Wiring: max. eight (8) 12 AWG (4in/4out), wiring rated for at least 90°C

Performance Summary

- 2700K, 3000K, 3500K and 4000K CCTs; 80 CRI min., 83 typical; high 90+ CRI available
- Excellent fixture-to-fixture color consistency with a 3-step MacAdam Ellipse tolerance
- All R6 Downlights are available for non-dimming and dimming applications; for compatible Dimmers, refer to the Dimming Specification Sheet
- Flanged or Trimless Specification Grade Trims available in several different styles and finishes
- Trimless options require use of a Mud Frame (MF6, ordered separately) for securing housing and trim in 1/2- to 1-inch ceiling thicknesses only
- Trimless options cannot be used with Remodel Style Housings (R6RM) or with Slope Ceiling Adapters (RSA6L)
- UL8750 and Class 2 Compliant; RoHS Compliant, US only





TYPE DATE **PRO IFCT**

R6 SERIES | 6-Inch Round Downlight Trims

FLANGED TRIM OPTIONS



C6322-CLR Clear Specular Reflector

C6322 Series

Specification Grade Reflector 5-3/4-Inch ID, 7-Inch OD 4-1/4-Inch Height

Specification Grade Reflector. For Wet Location approved trim, add "-C" for Clear Lens or "-SL" for Sandblast Lens after finish code.

C6323 Series

Lensed Wall Wash Reflector 5-5/8-Inch ID, 7-Inch OD, 4-1/4-Inch Height

C6323-CLR Clear Reflector

C6322N-CLR¹ - Clear Specular Reflector: 32° Narrow Beam C6322M-CLR¹ - Clear Specular Reflector: 65° Medium Beam

C6322W-CLR1 - Clear Specular Reflector: 74° Wide Beam C6322-PL1 - 59° Platinum Reflector

C6322-PLWHE - 59° Platinum Wheat Reflector C6322-WHT - 72° White Reflector

1. Available with White Painted Flange: add-WPF to end of part number

: These Model Options are eligible for **Speed**Ship



C6323 - Lensed Wall Wash Reflector

Finish

CLR1 - Clear **PL**¹ - Platinum WHT - White

1. Available with White Painted Flange: add -WPF to end of part number



C6321-WHT-PL White Reflector/ Platinum Lower Cone



C6321 Series

Two Piece Reflector with Lower Cone and Flat Lens 5-3/4-Inch ID, 7-Inch OD 4-1/4-Inch Height

Two Piece Reflector: Upper Reflector, Lower Cone. Includes one (1) LF38-CL Clear Glass Lens. Approved for Wet Locations when Glass Lens is installed.



C6327-CLR-PL

Clear Reflector/Platinum Lower Cone/Regressed Prismatic Convex Lens



C6327 Series

Two Piece Reflector: Lower Cone with Prismatic Convex Lens 5-3/4-Inch ID, 7-Inch OD 4-1/4-Inch Height

Two Piece Reflector with Prismatic Convex Lens: Upper Reflector, Lower Cone, Prismatic Convex Lens with 1-1/2inch regress. Wet Location Listed.

Reflector C6321-CLR - Clear C6321-WHT - White



C6321-WHT-B White Reflector/Black Baffle

C6321 Baffle Series

Lower Cone

CLR - Clear

PL - Platinum

Two Piece Reflector with Lower Baffle and Flat Lens 5-3/4-Inch ID, 7-Inch OD 4-1/4-Inch Height

Two Piece Reflector: White Upper Reflector, Black or White Lower Baffle. Includes one (1) LF38-CL Clear Glass Lens. Approved for Wet Locations when Glass Lens is installed.



Reflector



Clear Reflector/White Lower Baffle/Regressed Prismatic Convex Lens





C6327 Baffle Series

Lower Cone

Two Piece Reflector: Lower Baffle with Prismatic Convex Lens 5-3/4-Inch ID, 7-Inch OD

4-1/4-Inch Height

Two Piece Reflector with Prismatic Convex Lens: Upper Reflector, Lower Baffle, Prismatic Convex Lens with 1-1/2inch regress. Wet Location Listed.

Reflector

C6321-CLR - Clear C6321-WHT - White Lower Baffle

B - Black

P - White

Reflector

C6327-CLR - Clear C6327-WHT - White Lower Baffle

B - Black

P - White



CATALOG NO.

DATE PROJECT TYPE

R6 SERIES | 6-Inch Round Downlight Trims

TRIMLESS OPTIONS

Trimless Options require use of Mud Frame accessory (MF6, ordered separately)



CN6322-CLR Clear Specular Reflector



CN6322 Series

Specification Grade Trimless Reflector

5-7/8-Inch ID, 6-1/4-Inch OD, 4-1/4-Inch Height

Specification Grade Reflector. For use with 1/2- to 1-inch ceiling thicknesses only. For Wet Location approved trim, add "-C" for Clear Lens or "-SL" for Sandblast Lens after finish code.

Cannot be used on Remodel Housings (R6RM) or with Slope

Ceiling Adapters (RSA6L).



CN6323-CLR Clear Reflector

CN6323 Series

Trimless Lensed Wall Wash Reflector 5-5/8-Inch ID; 6-1/4-Inch OD

For use with 1/2- to 1-inch ceiling thicknesses only. Cannot be used on Remodel Housings (R6RM) or with Slope Ceiling Adapters (RSA6L).

Trim

CN6323 - Lensed Wall Wash Reflector

Finish

CLR - Clear PL - Platinum WHT - White

CN6322N-CLR - Clear Specular Reflector: 32° Narrow Beam CN6322M-CLR - Clear Specular Reflector: 65° Medium Beam CN6322W-CLR - Clear Specular Reflector: 74° Wide Beam

CN6322-PL - 59° Platinum Reflector **CN6322-WHT** - 72° White Reflector



Mud Frame

Required for use with trimless options

12-Inch OD

Die-cast Ring with Steel Mesh Frame. Painted white. Required for use with trimless options.



MF6 - 6-Inch Mud Frame



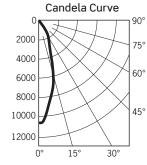
R6 SERIES | 6-Inch Round Downlight Photometrics

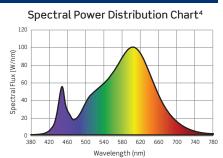
R6NC630K12D / C6322N-CLR

Fixture Delivered Lumens: 4152.8 Total Watts@120V: 45.0 Lumens Per Watt: 92.3 Center Beam Candle Power: 10628 Beam Distribution: 31.5° Spacing Criterion: 0.53 Color Rendering Index (CRI)¹: 83.4 Color Temperature (CCT)²: 3065K

Designed for 50,000 Hour Lamp Life³ LM-63 Test No. G21070804 LM-79 Test No. S21072002

Intensity Distribution								
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)						
6 FT	295.2	3.4						
8 FT	166.1	4.5						
10 FT	106.3	5.7						
12 FT /	73.8	6.8						
14 FT	54.2	7.9						
16/FT	41.5	9.0						





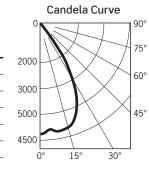
R6NC630K12D / C6322M-CLR

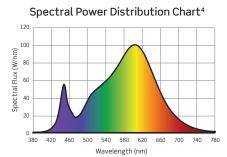
Fixture Delivered Lumens: 4069.6 Total Watts@120V: 45.0 Lumens Per Watt: 90.4 Center Beam Candle Power: 4259 Beam Distribution: 65.1° Spacing Criterion: 0.95 Color Rendering Index (CRI)¹: 83.4 Color Temperature (CCT)²: 3065K

Designed for 50,000 Hour Lamp Life³ LM-63 Test No. G21070803 LM-79 Test No. S21072002

Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
6 FT	118.3	7.7
8 FT	66.5	10.2
10 FT	42.6	12.8
12 FT /	29.6	15.3
14 FT	21.7	17.9
16/FT	16.6	20.4





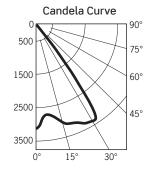
R6NC630K12D / C6322W-CLR

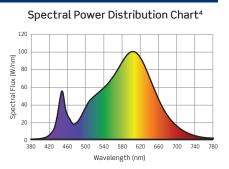
Fixture Delivered Lumens: 4197.4 Total Watts@120V: 45.0 Lumens Per Watt: 93.3 Center Beam Candle Power: 3135 Beam Distribution: 73.6° Spacing Criterion: 1.1 Color Rendering Index (CRI)¹: 83.4 Color Temperature (CCT)²: 3065K

Designed for 50,000 Hour Lamp Life³ LM-63 Test No. G21070806 LM-79 Test No. S21072002

Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	DIAMETER (FT.)
6 FT	87.1	9.0
8 FT	49.0	12.0
10 FT	31.3	15.0
12 FT /	21.8	17.9
14 FT	16.0	20.9
16/FT	12.2	23.9





1. Accuracy of Rendering Colors 2. Color Appearance of Light Source 3. Dependent on Surrounding Temperatures 4. Colors Present within the Light Source

PHOTOMETRIC MULTIPLICATION FACTORS

Lumen output values fluctuate based on Color Temperature, Luminaire Wattage/Output and Trim Selection. To estimate lumen output of these various options, multiply 3000K results by the following:

CCT	T MULTIPLI	ERS		TRIM MULTIPLIERS					
CCT	STD CRI	HIGH CRI	12W/SERIES 1	16W/SERIES 2	21W/SERIES 3	30W/SERIES 4	38W/SERIES 5	C6322-PL	C6322-WHT
2700K	0.94	0.70							
3000K	N/A	0.75	0.28	0.39	0.54	0.72	0.88	1.02	0.92
3500K	1.0	0.81	0.20						
4000K	1.0	0.87							



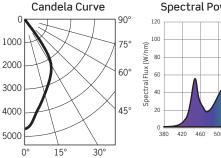
R6 SERIES | 6-Inch Round Downlight Photometrics

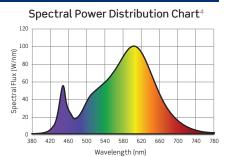
R6NC630K12D / C6322-PL

Fixture Delivered Lumens: 4141.0 Total Watts@120V: 45.0 Lumens Per Watt: 92.0 Center Beam Candle Power: 5337 Beam Distribution: 58.5° Spacing Criterion: 0.91 Color Rendering Index (CRI)¹: 83.4 Color Temperature (CCT)²: 3065K

Designed for 50,000 Hour Lamp Life³ LM-63 Test No. G21070805 LM-79 Test No. S21072002

Intensity Distribution								
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)						
6 FT	148.3	6.7						
8 FT	83.4	9.0						
10 FT /	53.4	11.2						
12 FT /	37.1	13.5						
14 FT	27.2	15.7						
16/FT	20.8	17.9						





1. Accuracy of Rendering Colors 2. Color Appearance of Light Source 3. Dependent on Surrounding Temperatures 4. Colors Present within the Light Source

PHOTOMETRIC MULTIPLICATION FACTORS

Lumen output values fluctuate based on Color Temperature, Luminaire Wattage/Output and Trim Selection. To estimate lumen output of these various options, multiply 3000K results by the following:

CC1	T MULTIPLI	ERS		TRIM MULTIPLIERS						
CCT	STD CRI	HIGH CRI	12W/SERIES 1	16W/SERIES 2	21W/SERIES 3	30W/SERIES 4	38W/SERIES 5	C6322-PL	C6322-WHT	
2700K	0.94	0.70								
3000K	N/A	0.75	0.28	0.39	0.54	0.72	0.88	1.02	0.92	
3500K	1.0	0.81	0.20							
4000K	1.0	0.87								





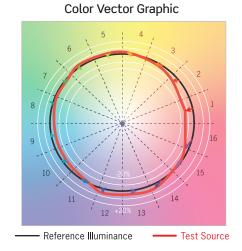
R6 SERIES | 6-Inch Round Downlight Photometrics

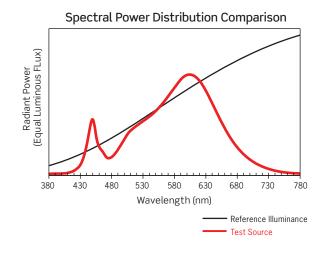
TM-30 DATA: R6NC630K12D / C6322M-CLR

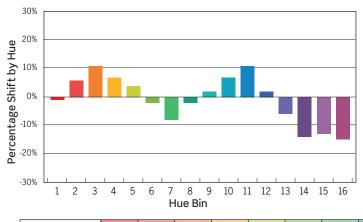
ANSI/IES TM-30-18 Color Rendition Report Test No. S21072002

Colors are for visual orientation purposes only

$\begin{array}{c|c} R_{_f} & 86 \\ R_{_g} & 97 \\ \hline CCT(K) & 3065K \\ D_{_{UV}} & 0.0017 \\ u^{_I} & 0.2477 \\ v^{_I} & 0.5224 \\ \end{array}$









HUE BIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
HUE SHIFT	-1%	6%	11%	7%	4%	-2%	-8%	-2%	1%	7%	11%	2%	-6%	- 14%	-13%	-15%
R _f VALUE	81	82	79	88	93	93	87	94	91	85	83	88	89	82	80	80



R6 SERIES | 6-Inch Round Downlights: Dimming Specifications

- Incandescent 120V AC Dimmers adjust the light with Forward Phase Control, where the Dimmer "chops" the forward part of the AC Wave to deliver less or more power to the light source. No Neutral Wire Connection required.
- Electronic Low Voltage 120V AC Dimmers adjust the light with Reverse Phase Control, where the Dimmer "chops" the back part of the AC Wave to deliver less or more power to the light source. Neutral Wire Connection required.
- 0–10V DC Low Voltage Dimmers operate using two (2) Low Voltage Dimming Wires that are separate from the 120V or 277V AC Power. The Dimmer sends a Variable Output Voltage to the luminaire based upon the dimming level. 10V Corresponds to undimmed operation, 5V to 50% and so on. Switching On/Off is controlled with the Line Voltage Power Input to the Dimmer (120V or 277V AC). Dimming operation is controlled with the 0–10V DC Low Voltage Wiring Connection between the Dimmer and the LED Driver. The Control Signal runs on two (2) low voltage control wires color coded Purple and Pink/Gray.
- Lutron EcoSystem Drivers provide continuous dimming from 1%-100%. For a complete list of compatible Dimmers and Controls, visit www.lutron.com
- Use DALI approved Controls for dimming eldoLED ECOdrive, 1% Dimming (Dimming Option MVD7) and eldoLED SOLOdrive, 0.1% Dimming (Dimming Option MVD9)

			TRIAC, ELV, 0-10V* (12D, 27D, MVD)	eldoLED ECOdrive 0-10V (12D6, 27D6, MVD6)	eldoLED SOLOdrive 0-10V (12D8, 27D8, MVD8)
Manufacturer	Product	Model	Light Output	Light Output	Light Output
Leviton	IllumaTech	IPI06-1LZ	1%-100%	N/A	N/A
Leviton	SureSlide	6631-2	1%-100%	N/A	N/A
Leviton	Vizia	VPE06	9%-100%	N/A	N/A
Leviton	Trimatron	6683-IW	6%-100%	N/A	N/A
Leviton	Decora	6161	15%-100%	N/A	N/A
Leviton	SureSlide	6633-P	1%-100%	N/A	N/A
Leviton	IllumaTech	IPE04	6%-100%	N/A	N/A
Leviton	IllumaTech	IP710-DLX	N/A	1%-100%	0.1%-100%
Cooper	Devine	DLC03P	1%-100%	N/A	N/A
Cooper	Skye	SLC03P	0%-100%	N/A	N/A
Cooper	Decorator	DAL06P	0%-100%	N/A	N/A
Pass & Seymour	Titan	CD4FB-W	N/A	1%-100%	0.1%-100%
Synergy		ISD BC	N/A	1%-100%	0.1%-100%
Watt Stopper	Miro Decorator	DCLV1	N/A	1%-100%	0.1%-100%
Lutron	Ariadni	TGCL-153P	1%-100%	N/A	N/A
Lutron	Ariadni	TG-600P	13%-100%	N/A	N/A
Lutron	Diva	DVCL-153P	1%-100%	N/A	N/A
Lutron	Diva	DV600P	6%-100%	N/A	N/A
Lutron	Diva	DVELV303P	6%-100%	N/A	N/A
Lutron	Diva	DVTV	N/A	1%-100%	0.1%-100%
Lutron	Faedra	FAELV500	12%-100%	N/A	N/A
Lutron	Lumea	LG600P	8%-100%	N/A	N/A
Lutron	Maestro	MAELV600	16%-100%	N/A	N/A
Lutron	Nova	NFTV	N/A	1%-100%	0.1%-100%
Lutron	Nova T	NTFTV	N/A	1%-100%	0.1%-100%
Lutron	Skylark	S-603PG	5%-96%	N/A	N/A
Lutron	Skylark	S600P	5%-100%	N/A	N/A
Lutron	Skylark	SELV300P	10%-100%	N/A	N/A
Lutron	Skylark	CT103P	9%-100%	N/A	N/A

*277V TRIAC Dimming is not available

NOTES

- 1. Testing was performed with a single luminaire connected to Dimmer.
- 2. Testing has been performed on these Dimmers, but this does not imply any warranty of compatibility.
- 3. Dimming performance can be influenced by different Loads, as well as variations in Dimmer Switches within the same Model.
- 4. Dimmer Maximum Load Rating with LED may differ from published Traditional Source Dimmer Ratings. Consult manufacturer for maximum Dimmer information.
- 5. Consult factory for additional dimming information.